A2575-2

American Petroleum Institute
1220 L Street, Northwest
Washington, D.C. 20005

Monthly Statistical Report

Prepared by the Statistics Department

Vol. 9, No. 6

JULY 17, 1985

JUNE 1985

ESTIMATED U.S. PETROLEUM BALANCE

SUMMARY

TOTAL ENERGY

Mainly because of slower economic growth this year compared to last, U.S. energy consumption is estimated to have risen less than 1 percent in the first half of 1985. This contrasts with the more-than-4 percent increase in 1984 versus the prior year. As Table I shows, petroleum's 2.2 percent decline this year was more than offset by increases in coal and non-hydrocarbon energy use; natural gas consumption remained about the same as in the first half of 1984. Largely as a result of switching away from residual fuel oil by electric utilities and industrial users, petroleum's market share, at 40.3 percent, was down more than a percentage point from the first half of 1984. Higher electricity demand, combined with the continuing shift to coal in this sector, increased coal's market share by a percentage point.

TABLE I

ESTIMATED ENERGY CONSUMPTION BY TYPE
(QUADRILLION BTU's)

	Petroleum	Natural Gas	Coal	Other	Total
1984 First Half	15.6	9.7	8.4	3.9	37.6
1985 First Half	15.2	9.7	8.8	4.0	37.7
Change	-0.4	0.0	+0.4	+0.1	+0.1
Percent Change[1/]	-2.2%	0.0%	+5.3%	+4.6%	+0.8%
First Half 1984 Share (Percent)	41.5%	25.9%	22.3%	10.4%	100.0%
First Half 1985 Share (Percent)	40.3%	25.7%	23.3%	10.7%	100.0%
Percentage-Point Change in Market Share	-1.2	-0.2	+1.0	+0.3	

[1/] Adjusted for differing number of days in the two periods.
Note: Calculations based on unrounded numbers.

PETROLEUM PRODUCTS

As in prior months, the level of petroleum products supplied in June fell below year-earlier levels, the 2.8%, 435 thousand barrel per day (B/D) decrease contributing to a roughly 340 thousand B/D decline in first-half deliveries. Except for naphtha jet and distillates, product demand is estimated to have declined across the board in June; for the first 6 months, gasoline and kerosine jet fuel deliveries provided the only year-to-year increases. Exhibit I traces seasonally-adjusted deliveries since 1983.

June crude production, while failing to match May's recent-year record, was 123 thousand B/D greater than last year's. Second quarter and total first-half production levels exceeded corresponding 1984 periods by about 60 thousand and 40 thousand B/D, respectively.

Imports decreased about 100 thousand B/D in June and 125 thousand B/D during the second quarter, compared with last year, but, because of a more-than 1.1 million barrel per day year-to-year deficit in the first quarter, ended the first half some 600 thousand B/D below year-earlier levels.

June inventories rose about 1 million barrels from prior-month levels, a fraction of their normal seasonal increase.

PRODUCTS SUPPLIED[1/]

Gasoline

ALMOST 2% AHEAD OF FIRST-HALF 1984.

The level of gasoline deliveries fell 88 thousand B/D in June from year-earlier levels, despite the fact that current-year figures include an estimated 50-60 thousand B/D in sales by blenders not part of last year's reporting universe. June was one of the few months during the past two years in which year-to-year declines in gasoline deliveries were experienced, though increases generally have not been large. But, with demand relatively weaker in May than earlier in the year and June showing a deficit, deliveries increased only 114 thousand B/D during the first half as a whole, and about half of that advance is linked to the increase in the reporting population referred to above. What small true rise remains is, as has been the case for some time, the net result of real gasoline prices, still lower than last year on an inflation-adjusted basis despite a recent upward trend, and higher real disposable income, offset by increases in engine efficiency. Real disposable income has recently been rising at an average 4% annual rate compared with last year (5 month comparison). Posted gasoline prices rose about ¾¢ in June from May levels, but, despite their recent advance, are, when adjusted for inflation, still some 3 percent below year-earlier levels.

Gasoline prices have been generally higher during the last decade than in the past, leading to fuel conservation efforts. In response, automobile purchases were directed to more fuel-efficient vehicles, offsetting to a large degree the growth in gasoline demand that would have otherwise occurred. Exhibit II shows gasoline demand since 1981. It indicates that gasoline demand, because of higher real disposable income and a decline in real gasoline prices from the high reached in early 1981, would have increased some 15% in that four-year span. Instead, the increase in fuel-efficiency, as reflected in rising "miles per gallon" figures, held the increase to about 2%.

Unleaded gasoline's share of the gasoline market rose to more than 64% in June, more than five percentage points above the year-earlier share. Sales of new cars increased about 3% during the first half of 1985 compared with already-strong first-half 1984 levels, and scrappage of older cars, a portion of which still use leaded gasoline, is estimated to have been substantial. Both factors contribute to the increase in unleaded's market share.

Distillates

UP MORE THAN 3% IN JUNE BUT DOWN SLIGHTLY FOR THE FIRST HALF OF 1985.

Distillate deliveries were 89 thousand B/D (3.4%) ahead of last year in June despite lower transportation demand but, for the year to date, are slightly below the corresponding 1984 period. For most of the first half of 1985, deliveries have suffered from continuing price uncertainties and lower demand for diesel transportation fuels. As the economy cooled, rail and truck traffic levels are estimated to have both fallen about 4% below year-earlier levels during the first half. The adverse effect of reduced rail and truck traffic on six-month distillate deliveries is estimated to be about 50 thousand B/D.

Residual Fuel Oil

DOWN MORE THAN 20% FOR JUNE AND THE FIRST HALF VERSUS LAST YEAR

With the U.K. coal strike settled in early March, residual fuel oil prices dropped sharply. Despite some price firming in June, prices were still $5-6 per barrel below early-1985 levels and lower than last year by similar amounts. Nevertheless, delivery levels have continued to lag last year's levels. Residual fuel oil deliveries in June were 284 thousand B/D (21.1%) below last year, about in line with the year-to-date trend.

TABLE II

ESTIMATED SECTORAL DEMAND FOR RESIDUAL FUEL OIL
(in 000's of barrels per day)

	Utilities	Bunkers	Industrial and Other	Total
1984				
First Half	540	362	634	1536
1985				
First Half	390	380	454	1224
Change	-150	+18	-180	-312

As the comparison in Table II shows, not even the recent sharp decline in resid prices appears to have slowed the decline in resid demand. During the first quarter, the year-to-year loss was almost evenly divided between the electric utility and industrial sectors, with a slight increase in bunker fuel deliveries providing a minor offset. In early spring, the decline in the industrial sector was about twice that of the electric utility sector, but resid prices that continued to slide precipitously until early June may have helped to reduce the decline for the first half as a whole to an estimated 150 thousand and 180 thousand B/D for electric utilities and the industrial sector, respectively. However, the fact that natural gas prices have also been on a generally-downward trend, in part because of increasing spot sales and other special marketing arrangements, appears to have minimized any switch-back to residual fuel oil, despite its substantial price slide.

As the total energy tabulation in Table I above shows, coal continued to make gains in market penetration. This is also true in the electric utility sector where coal's share during the first 3 months of 1985 rose to over 55% of total input from 54% in the first quarter of 1984. Petroleum (mostly residual fuel oil) continued to lose ground, its 20% input loss against last year reducing its share of total first quarter input from last year's 6.0% to 4.6% in 1985. Natural gas, on the other hand, rose about 4% to garner a close to 10% share of input, only slightly higher than last year. These trends are not likely to have been materially altered in the second quarter. In recent years, as coal continued to make gains, the main focus has been on price competition between residual fuel oil and natural gas for the remainder of the electric utilities' needs.

Kerosine Jet Fuel

DOWN 4% IN JUNE, UP ABOUT 1% IN THE FIRST HALF, COMPARED WITH LAST YEAR.

Kerosine jet fuel deliveries fell 4% in June and were up only slightly from last year's levels for the second quarter and the first six months of the year. Delivery levels, previously on a long-term uptrend, were affected by a strike at United Airlines that lasted from mid-May to mid-June. For the first four months, mainly because of a surge in April, deliveries had been about 3% greater than in the corresponding 1984 period, some 1 to 2 percentage points below the estimated increase in "miles flown". However, year-to-year increases have been decidedly below 1984's as the economy shifted into lower gear, and May/June levels were also affected by the strike.

Other Oils

DOWN MORE THAN 4% AND 3%, RESPECTIVELY, FOR JUNE AND THE FIRST HALF.

Deliveries of "other oils" continued their decline in June, their 173 thousand B/D fall contributing to the 120 thousand B/D (3.2%) six-month decline.

Sales to the chemical industry were a major factor in the overall decline, as that industry failed to match first half 1984's buoyancy and imports of chemicals continued to rise. The daily average of deliveries of petrochemicals fell 17% during the first four months of the year, compared with the corresponding 1984 period. Demand in May and June are also estimated to have fallen considerably, accounting for about 65 thousand B/D, or roughly half, of the six-month drop in total deliveries of "other oils." Special naphthas are estimated to have experienced a 20-30 thousand B/D decline for the first half.

Liquefied petroleum gases are estimated to be about even with last year's results for the first half of the year. Butane sales are estimated to be about 8% ahead of last year and propane and ethane deliveries about equal to last year's first half.

It is unlikely that allocation of federal funds in early March has already been translated into higher asphalt and road oil deliveries, and first half 1985 delivery levels are estimated to be only some 40 thousand B/D, about 12 1/2%, ahead of last year.

(In millions of B/D)	JUNE ESTIMATES			YEAR-TO-DATE ESTIMATES		
	1985	1984	% Change	1985	1984	% Change
—Total domestic products supplied	15.3	15.7	(2.8)	15.5	15.9	(2.2)
—Motor gasoline supplied	7.0	7.1	(1.2)	6.7	6.6	1.7
—Distillate fuel oil supplied	2.7	2.6	3.4	3.0	3.0	(0.6)
—Residual fuel oil supplied	1.1	1.3	(21.1)	1.2	1.5	(20.3)

PETROLEUM SUPPLY[1/]

Total supply fell 408 thousand B/D during June and 754 thousand B/D for the first six months of the year, compared with year-earlier levels. About 140 thousand B/D of the decline in first-half supply arose from lower total domestic supply; the bulk, however, is attributable to a more than 600 thousand B/D drop in imports.

Production

UP 1/2% FOR THE FIRST HALF VERSUS LAST YEAR.

Crude oil production continued to be ahead of last year in June, rising 123 thousand B/D (1.4%) over year-ago levels, though falling almost 60 thousand B/D from the recent-year record set in May. North Slope production (Prudhoe Bay plus Kuparuk) rose 230 thousand B/D, but a roughly 100 thousand B/D decline in the lower 48 offset almost half the net Alaskan increase. For the first 6 months of the year, Alaskan production, net of a small offshore production decline, was 86 thousand barrels ahead of last year, essentially because of higher production at Kuparuk. Lower 48 production ended the first half about 46 thousand B/D below first-half 1984 levels.

Imports

DOWN 11 1/2% IN FIRST HALF.

Total imports fell 101 thousand B/D (2.0%) below year-ago levels in June; however, because of a substantial 1.1 million B/D year-to-year decline in the first quarter, they were more than 600 thousand B/D below last year's first half. Six-month crude and product imports both fell by roughly 300 thousand B/D. The shortfall in product imports arose essentially from lower residual fuel oil imports, as its demand continued to fall.

Attached Exhibit III shows the level of quarterly imports since 1981. Imports were considerably lower in the first quarter of the year than in the corresponding 1984 period, mainly because of continuing price uncertainty. In the second quarter, imports rose to within 129 thousand B/D of 1984's second quarter. As shown in the exhibit, the second-quarter decrease in imports was the result of lower residual fuel oil imports. For the first six months, gasoline imports (including gasoline components), on the other hand, are estimated to have risen more than 20% to about 480 thousand B/D; distillate imports, in part because of warmer weather in the second quarter than last year, fell about 15%.

For the first four months, Mexico was the largest source of imports into the U.S., with Canada a close second, followed by Venezuela and Indonesia. Imports from OPEC countries receded by more than 400 thousand B/D during the four-month period, largely as a result of lower imports from Saudi Arabia and Algeria. Overall, imports from OPEC countries for the first four months represented 33% of total imports, 2 percentage points below last year's level.

Inventories

UP 1 MILLION BARRELS IN JUNE.

Inventories rose one million barrels in June and are some 53 million barrels below year-earlier levels; about half of that decline is attributable to adjustments in gasoline inventory levels. Last year's effort to refill distillate storage had resulted in co-production of gasoline, not then needed to fill immediate needs, and concurrent inventory increases.

Inventories of "other oils" rose in June but were some 12 million barrels below last year, in good part because the entire spectrum of natural gas liquids and liquefied refinery gases has been experiencing year-to-year inventory declines as prices languished.

Gasoline inventories rose more than three million barrels in June, when normally there is a several-million-barrel seasonal decline. They represent 31 days of supply, about average for this time of year. Distillate inventories rose 5 million barrels to within 3 million barrels of last June's level. Crude inventories, though falling about 12 million barrels in June, at 343 million

barrels remained within the broad 340-360 million barrel range maintained for most of the past three years. While this level of inventories is considerably above minimum operating levels, it gives the system added flexibility in handling product demand changes and incidents of price and supply uncertainties.

Exhibit IV shows crude and major product inventories for the past 6½ years.

Operations

UTILIZATION UP MORE THAN 2 PERCENTAGE POINTS IN JUNE FROM LAST YEAR'S LEVEL.

For the past several months, refinery utilization has gradually risen. June's rate of refinery utilization reached almost 80%. As input to distillation units was only minimally above last year, it was essentially the estimated 450 MBD decrease in operable capacity that raised the refinery utilization rate by more than two percentage points over year-earlier levels.

(In millions of B/D)	JUNE ESTIMATES			YEAR-TO-DATE ESTIMATES		
	1985	1984	% Change	1985	1984	% Change
—Total supply	16.1	16.5	(2.5)	15.9	16.7	(4.5)
—Crude production[2/]	9.0	8.9	1.4	8.9	8.8	0.5
—Crude oil imports[3/4/]	3.3	3.2	2.0	2.9	3.2	(9.5)
—Product imports	1.8	1.9	(8.5)	1.8	2.1	(14.4)

1/ Total supply, i.e., production plus imports adjusted for net stock change is equal to total products supplied from primary storage. Total products supplied from primary storage less exports is equal to total domestic products supplied. Information contained in this report is derived from information published in the API Weekly Bulletin and is based on historical analysis of the industry. All data reflect the most current information available to the API and include all previously published revisions.

2/ Includes lease condensate.

3/ Beginning with January 1977, the U.S. Department of Energy began reporting crude oil imports as of the date of importation. Previously, this data, with the exception of Canadian crude imports, was reported as of the date it was received at the refinery. This change may affect both the level of crude oil imports and crude oil stocks. API estimates of these data may, therefore, differ slightly from those of the U.S. Department of Energy.

4/ API data do not include crude oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR (according to the U.S. Department of Energy, the SPR held approximately 477 million barrels as of June 30, 1985.

ESTIMATED UNITED STATES PETROLEUM BALANCE

(Daily Average in Thousands of 42 Gallon Barrels)

Products Supplied/Supply From Primary Storage	JUNE			YEAR-TO-DATE		
	1985[1]	1984[2]	% Change	1985[3R]	1984[2]	% Change
Products Supplied:						
Total motor gasoline	7,019	7,107	(1.2)	6,731	6,617	1.7
Finished leaded motor gasoline*	2,498	2,893	(13.7)	2,481	2,781	(10.8)
Finished unleaded motor gasoline*	4,521	4,214	7.3	4,250	3,836	10.8
Naphtha-jet	230	212	8.5	216	218	(0.9)
Kerosine-jet	856	892	(4.0)	930	922	0.9
Distillate fuel oil	2,682	2,593	3.4	2,979	2,996	(0.6)
Residual fuel oil	1,060	1,344	(21.1)	1,224	1,536	(20.3)
All other oils[4]	3,661	3,834	(4.5)	3,674	3,794	(3.2)
Reclassified[5]	- 232	- 271	(14.4)	- 223	- 210	6.2
Total domestic products supplied	15,276	15,711	(2.8)	15,531	15,873	(2.2)
Exports	769	864	(11.0)	765	715	7.0
Total products supplied	16,045	16,575	(3.2)	16,296	16,588	(1.8)
Supply:						
Domestic production:						
Crude oil[6]	8,975	8,852	1.4	8,887	8,847	0.5
Natural gas liquids	1,595	1,613	(1.1)	1,619	1,608	0.7
Other supply[7]	429	841	(49.0)	672	862	(22.0)
Total domestic supply	10,999	11,306	(2.7)	11,178	11,317	(1.2)
Imports:						
Crude oil, total	3,301[10/]	3,237[10/]	2.0	2,901[10/]	3,207[10/]	(9.5)
Canadian	504	274	83.9	482	338	42.6
Other	2,797	2,963	(5.6)	2,419	2,869	(15.7)
Products, total	1,771	1,936	(8.5)	1,833	2,142	(14.4)
Residual fuel oil	403	685	(41.2)	486	789	(38.4)
Other	1,368	1,251	9.4	1,347	1,353	(0.4)
Total imports	5,072	5,173	(2.0)	4,734	5,349	(11.5)
Total supply	16,071	16,479	(2.5)	15,912	16,666	(4.5)
Stock change, all oils	+ 26	- 96	XXXX	- 384	+ 78	XXXX
Refinery Operations						
Input to crude oil distillation units	12,443	12,418	0.2	11,856	12,172	(2.6)
Operable capacity	15,619	16,069	(2.8)	15,577	16,109	(3.3)
Refinery utilization (%)[8]	79.7%	77.3%	3.1	76.1%	75.6%	0.7
Crude oil runs	12,270	12,255	0.1	11,719	12,008	(2.4)

Stocks (millions bbls.)	1985		1984[2]	% Change from . . .	
	June 30[9]	May 31[9]	June 30	Previous Month	Year Ago
Crude oil [10/]	342.9	355.1	352.9	(3.4)	(2.8)
Unfinished oils	115.6	113.3	110.8	2.0	4.3
Total motor gasoline**	219.2	215.8r/	245.5	1.6	(10.7)
Finished leaded motor gasoline*	82.4	76.4	96.7	7.9	(14.8)
Finished unleaded motor gasoline*	103.3	105.0	107.5	(1.6)	(3.9)
Naphtha-jet	6.5	6.7	6.9	(3.0)	(5.8)
Kerosine-jet	36.5	34.7	36.1	5.2	1.1
Distillate fuel oil	109.7	104.7	112.8	4.8	(2.7)
Residual fuel oil	41.1	43.1	46.9	(4.6)	(12.4)
All other oils	164.7	162.0r/	176.9	1.7	(6.9)
Total all oils	1,036.2	1,035.4r/	1,088.8	0.1	(4.8)

1/ Based on API estimated data converted to a monthly basis.
2/ Source: U.S. Department of Energy.
3/ Source: January-April, U.S. Department of Energy, May-June, API.
4/ Includes crude losses.
5/ Beginning with January 1981, U.S. Department of Energy began using a new data collection system which encompasses a method to ascertain the amount of product reclassified during the production phase. So that there will be no double counting of these volumes, they are subtracted from total domestic products supplied.
6/ Includes lease condensate.
7/ Includes Unaccounted-for crude oil, Refinery input of other hydrocarbons, and Processing gain.
8/ Represents "Input to crude oil distillation units" as a percent of "Operable capacity."
9/ Derived by interpolating API weekly stocks data.
10/ Data do not include oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR.
R/ Revised.
* Included in motor gasoline.
** Includes finished leaded, finished unleaded, and motor gasoline blending components stocks.

ESTIMATED UNITED STATES PETROLEUM BALANCE

(Daily Average in Thousands of 42 Gallon Barrels)

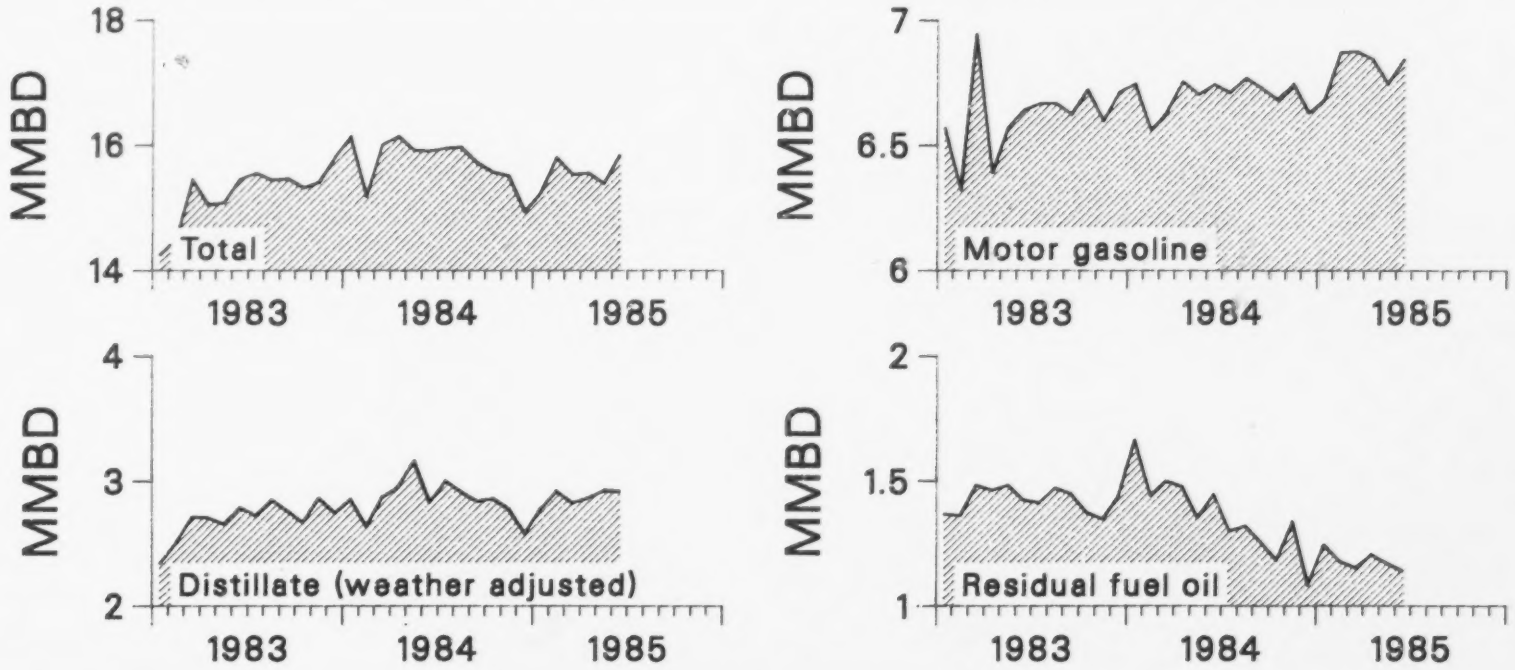
Products Supplied/Supply From Primary Storage	2nd QUARTER		
	1985[1]	1984[2]	% Change
Products Supplied:			
Total motor gasoline	6,965	6,891	1.1
Finished leaded motor gasoline*	2,555	2,866	(10.9)
Finished unleaded motor gasoline*	4,410	4,025	9.6
Naphtha-jet	230	237	(3.0)
Kerosine-jet	907	900	0.8
Distillate fuel oil	2,685	2,778	(3.3)
Residual fuel oil	1,090	1,321	(17.5)
All other oils[3]	3,620	3,735	(3.1)
Reclassified[4]	- 239	- 228	4.8
Total domestic products supplied	15,258	15,634	(2.4)
Exports	751	762	(1.4)
Total products supplied	16,009	16,396	(2.4)
Supply:			
Domestic production:			
Crude oil[5]	8,951	8,891	0.7
Natural gas liquids	1,608	1,616	(0.5)
Other supply[6]	616	915	(32.7)
Total domestic supply	11,175	11,422	(2.2)
Imports:			
Crude oil, total	3,362[9/]	3,397[9/]	(1.0)
Canadian	522	360	45.0
Other	2,840	3,037	(6.5)
Products, total	1,882	1,976	(4.8)
Residual fuel oil	407	633	(35.7)
Other	1,475	1,343	9.8
Total imports	5,244	5,373	(2.4)
Total supply	16,419	16,795	(2.2)
Stock change, all oils	+ 410	+ 399	XXXX
Refinery Operations			
Input to crude oil distillation units	12,182	12,312	(1.1)
Operable capacity	15,605	16,087	(3.0)
Refinery utilization (%)[7]	78.1%	76.5%	2.1
Crude oil runs	12,016	12,132	(1.0)

Stocks (millions bbls.)	2nd QUARTER		
	1985[8]	1984[2]	% Change
Crude oil	342.9[9/]	352.9[9/]	(2.8)
Unfinished oils	115.6	110.8	4.3
Total motor gasoline**	219.2	245.5	(10.7)
Finished leaded motor gasoline*	82.4	96.7	(14.8)
Finished unleaded motor gasoline*	103.3	107.5	(3.9)
Naphtha-jet	6.5	6.9	(5.8)
Kerosine-jet	36.5	36.1	1.1
Distillate fuel oil	109.7	112.8	(2.7)
Residual fuel oil	41.1	46.9	(12.4)
All other oils	164.7	176.9	(6.9)
Total all oils	1,036.2	1,088.8	(4.8)

1/ Source: U.S. Department of Energy, April; May-June, API.
2/ Source: U.S. Department of Energy.
3/ Includes crude losses.
4/ Beginning with January 1981, U.S. Department of Energy began using a new data collection system which encompasses a method to ascertain the amount of product reclassified during the production phase. So that there will be no double counting of these volumes, they are subtracted from total domestic products supplied.
5/ Includes lease condensate.
6/ Includes Unaccounted-for crude oil, Refinery input of other hydrocarbons, and Processing gain.
7/ Represents "Input to crude oil distillation units" as a percent of "Operable capacity."
8/ Derived by interpolating API weekly stocks data.
9/ Data do not include oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR.
* Included in motor gasoline.
** Includes finished leaded, finished unleaded, and motor gasoline blending components stocks.

EXHIBIT I

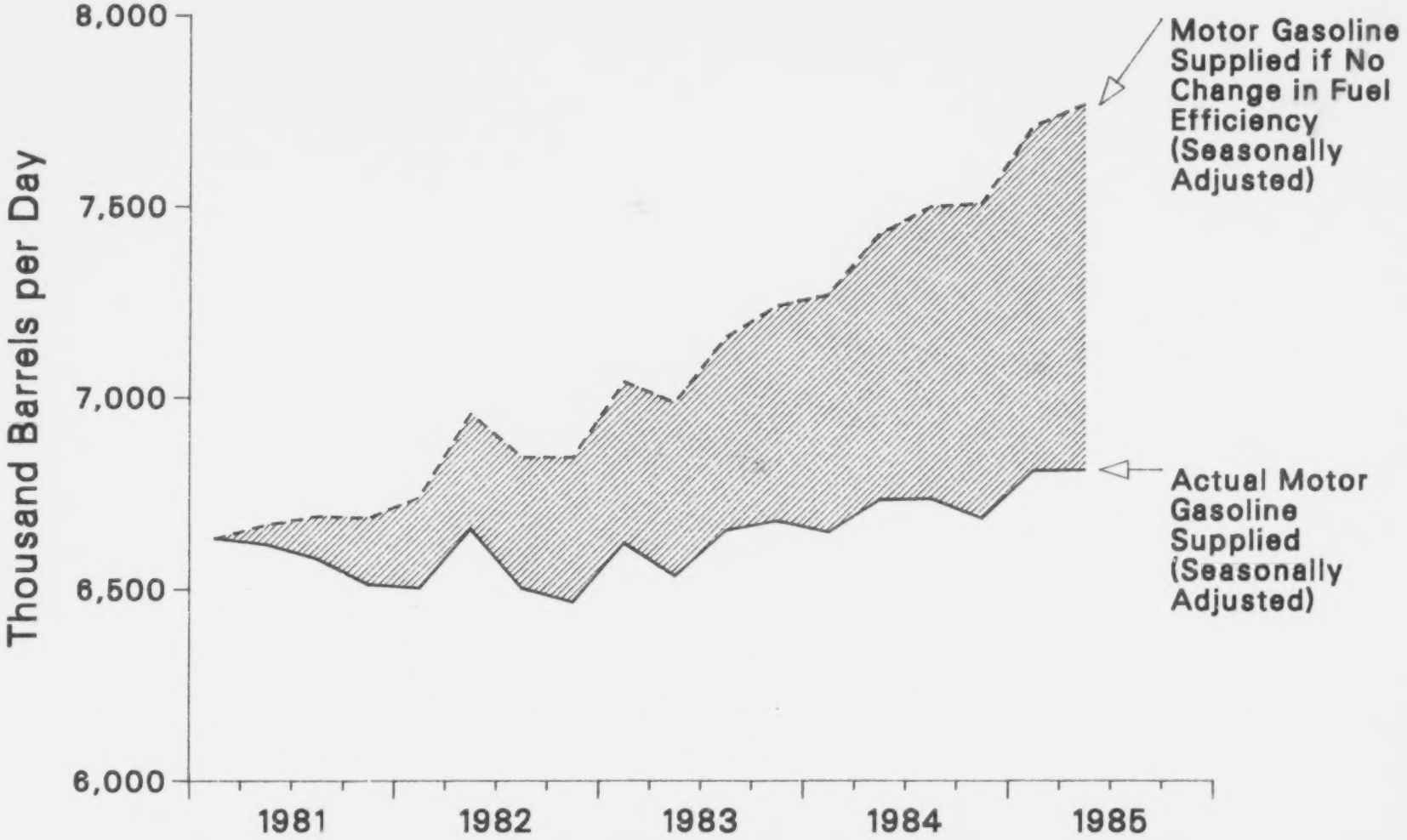
SEASONALLY ADJUSTED PRODUCT SUPPLIED



Sources: Department of Energy, American Petroleum Institute

EXHIBIT II

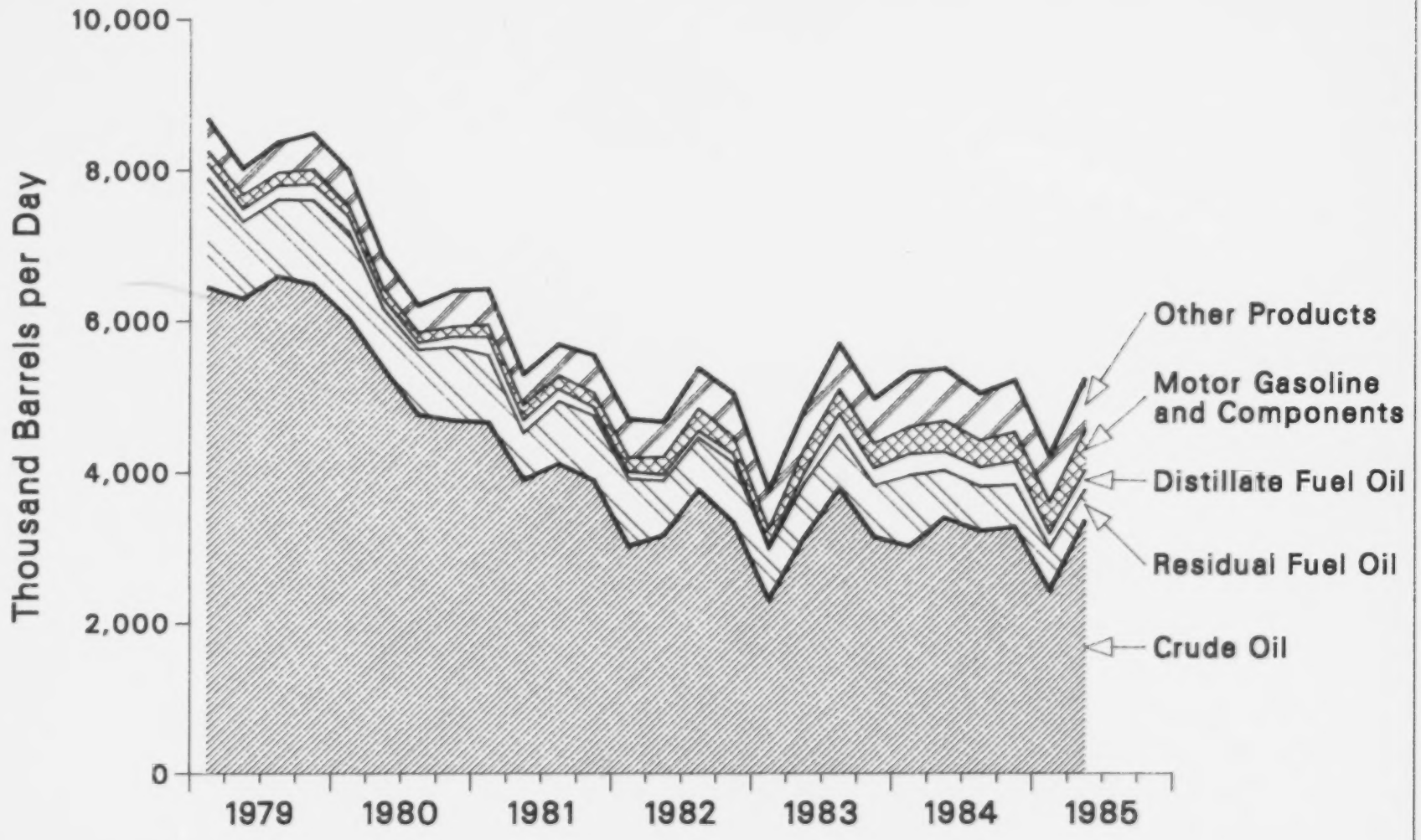
THE EFFECT OF FUEL EFFICIENCY IMPROVEMENTS ON MOTOR GASOLINE SUPPLIED



Sources: Department of Energy, American Petroleum Institute

EXHIBIT III

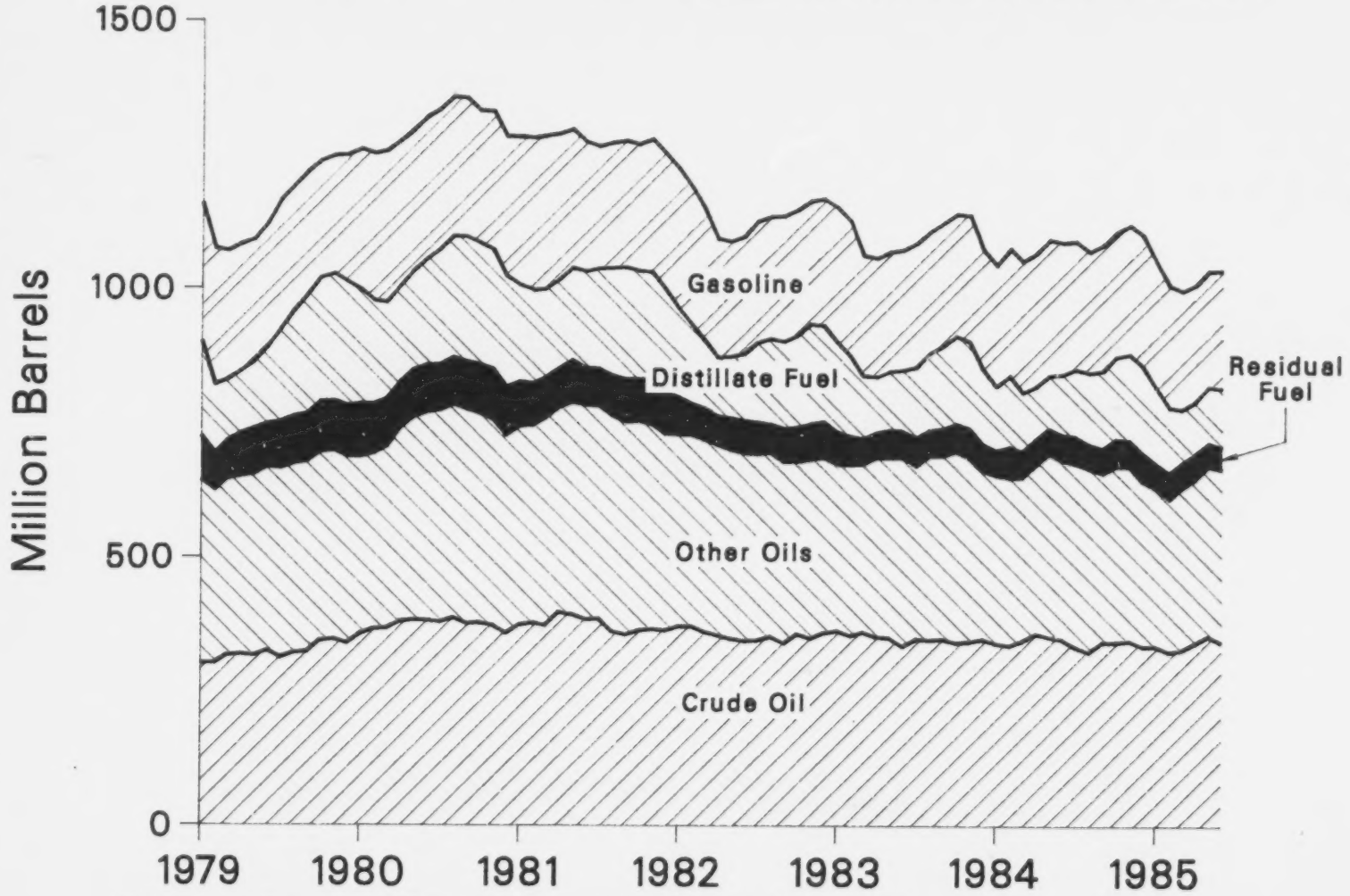
QUARTERLY CRUDE OIL AND PETROLEUM PRODUCT IMPORTS



Sources: Department of Energy, American Petroleum Institute

EXHIBIT IV

STOCKS OF CRUDE OIL AND REFINED PETROLEUM PRODUCTS



Source: Dept. of Energy/Energy Information Admin. and American Petroleum Institute